

JUN 20 2005

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6/20/05

Dear Dr. Shen Lee examiner and
(571-272-2439)

Dr. David Porta, Supervisor:
(571-272-2444)

For my application # 09/925,059, I cannot agree the
final decision in 3 areas:

① on your page 14, you said Ferguson has the same
optical sensor fusion as my invention. Sensor fusion must
at least have two sensors. Ferguson only has one sensor
and one eye, does not have 2 sensors, so it is not sensor
fusion. The night vision goggle or long infrared sensor can
see target under very low light level even complete darkness,
can see through smoke and dust, can his eye do that? Human
eye cannot replace sensor, it is a common sense.

② When the light (green) from I^2 and from LCD (white) of
LIR, in order to increase their outputs, I designed a special
filter or beam splitter that can reflect the green light almost 100%
and pass the LCD light almost 100%, no body has this invention.

③ A objective lens for $0.38 - 12\mu$ will have large color aberration
especially off axis 40° requested by night vision goggle, therefore,

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I only use one piece in the front as the common beam splitter to separate two wavebands the use other pieces to correct aberrations (especially the color aberration) in the much narrower bands $0.38-0.95 \mu$ and $8-12 \mu$. In these bands, lens materials are available and aberration corrections are well known. ②

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I hope to have an answer from Dr. Lee. I respect him as a ph. d. in physics, but sensor is different technology. I will withdraw all claims related with electronic fusion, head gear, etc. but I hope to keep the lens design, special beam splitter for eye viewer and the optical fusion or simultaneous optical & electronic fusion for VIS/NIR and LIR sensors.

How can I do? I need your help.

Erhan Zhang, ph. d.

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